**Methods** Attendees between November 2010 and June 2011 diagnosed with gonorrhoea were offered retesting 3–6 months after treatment, with a subsequent reminder to attend (recall arm). Re-attendance rates and frequency of gonorrhoea diagnosis were compared to a historic group who attended between October 2006 and April 2007, controlling for age, sex, sexual orientation and history of STI (control arm).
**Results** 242 patients were assessed in the recall arm. 95 (39%) re-attended within 6 months of initial attendance and 15 (6%) were positive for gonorrhoea. Of 202 controls, 44 (22%) re-attended within 6 months and 12 (6%) tested positive for gonorrhoea. Being actively recalled increased re-attendance at the clinic (β=2.2, p=0.001) but did not detect additional cases of gonorrhoea (β=1.2, p=0.9).
**Conclusion** These results strongly suggest that the CDC recommendation for re-testing for infection after 3 months is not an effective approach for unselected patients with gonorrhoea in the UK.

## P48 YEARLY TRENDS FOR THE INTERNET RECRUITMENT PROGRAM, HTTP://WWW.IWANTTHEKIT.ORG—WHAT HAPPENED TO THE STI PREVALENCE?

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**Background** The iwantthekit (IWTK) internet recruitment screening program began in 2004 and offered an opportunity to determine trends in prevalence for women and men were screened for STIs.
**Objectives** To determine significance in trends for STIs for the population accessing screening over time.
**Methods** Participants were recruited via the internet to request home collection kits and to collect either vaginal or penile swabs at home with subsequent mailing to a laboratory for screening for chlamydia (CT), gonorrhoea (GC), and trichomonas (TV) by NAATs. Prevalence for women and men were calculated by year and race for 2004–2011 for each organism. Linear regression analysis was performed to determine significance of temporal trends in gender-, STI-specific prevalence controlling for annual demographic composition of participants.
**Results** 3363 women were screened for CT and GC from 2004 to 2011; TV screening was added in 2006 (N=2692). From 2006 to 2011, 1370 men were screened for CT, GC, and TV. Prevalence varied: CT: 5.5%–10.6%; GC: 0.3%–2.7%; TV: 5.8%–13.3% for females and CT: 8.0%–15.4%; GC: 0.7%–1.9%; TV: 0.8%–12.4% for males. Most users were from Maryland (70.1%). The only statistically significant linear downtrend by year was CT prevalence in male participants <25 yr from 23.1% in 2007 to 12.5% in 2011, which was 2.4%/yr (p=0.012); while the prevalence in male ¡Ý25 years remained relatively stable from 6.2% in 2007 to 5.5% in 2011 (p=0.911). The remainder of STI prevalences in females and males did not show a downward linear trend by calendar year. GC prevalence in females was significantly correlated with the per cent of Black participants (p=0.030), while TV prevalence in females was positively associated with the number of participants <25 yr (p=0.032).
**Conclusions** IWTK attracted participants with high-risk sexual behaviours to use home collection for STI testing. Prevalence by year and by organism, for the most part, did not show a significant downward trend.

## P49 OTOSYPHILIS: MISSED OPPORTUNITIES FOR EARLY TREATMENT?

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**Background** Otosyphilis (OS) is one of the few reversible causes of hearing loss. Audiological symptoms and positive syphilis (SP) serology can be diagnostic of OS. Hearing outcome after treatment is poor and evidence for optimal management is lacking.
**Aim** To identify how OS is managed in our unit.
**Method** Case collection and notes review.
**Results** Seven (6 male, 1 female) patients (pts) with OS were identified between 2007 and 2011, of median age 34 yrs. Of these 7 pts: 6 (86%) had secondary stage and 1 (14%) late stage SP; 6 (86%) were coinfected with HIV (2 testing HIV+ at SP diagnosis); all presented with deafness (bilaterally in 3 pts); all had other symptoms of SP (commonly rash (4, 57%) and ocular involvement (3, 43%)). Of 6/7 pts consenting to lumbar puncture, neurosyphilis was probable in 1 (17%), excluded in 2 (33%) and considered possible in 3 (50%) pts. Median time from audiological symptoms to treatment was 2 months (range 2 days to 6 m). Four (57%) had previously visited a health care professional who failed to diagnose OS. Six (86%) and 5 (71%) pts received a neurological regimen and steroid cover respectively. Overall, hearing improved in 3 (43%) and stabilised in 4 (57%) pts. An improved audiological outcome was seen in 2/3 (67%) pts receiving early treatment (within 1-month of hearing loss) vs 1/4 (25%) of those receiving late treatment and in 3/6 (50%) pts receiving a neurological regimen vs 0/1 pts receiving standard treatment. Median time to treatment was shorter in pts with established HIV infection (2 months) than those testing HIV+ at SP diagnosis or testing HIV neg (3.5 months).
**Conclusion** This small study identifies a delay to treatment in many cases. Early treatment and treating with a neurological regimen may improve outcome. HIV+ pts may have more regular SP testing, reducing the delay to treatment. OS is uncommon, but with increasing rates of SP nationally, we must be alert to its manifestations and promptly initiate treatment.

## P50 CHLAMYDIA SURVEILLANCE IN THE USA: THE NEED FOR NEW STRATEGIES

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**Background** Preventing infertility through the prevention and control of chlamydia is a priority in the USA. Valid and timely surveillance data on chlamydial infections are needed to estimate disease burden, monitor trends, and inform and evaluate chlamydia prevention strategies.
**Methods** We assessed the strengths and weaknesses of the US chlamydia surveillance system, including notifiable disease reports, opportunistic data from screening programs, and national surveys.
**Results** Notifiable disease report data are heavily influenced by changes in screening coverage, empiric treatment, diagnostic test technology, and reporting practices. Although test positivity data from federally-funded screening programs can account for the number of tests conducted, data are affected by changes in clinics participating in the program, differences in screening criteria between clinics, and demographic shifts in clinic populations. National survey data are representative of the general population and estimate point prevalence. However, data are not timely and

low national chlamydia prevalence (estimated prevalence in 2009–2010 was 1.7%, 95% CI 1.0% to 2.3%) combined with small survey sample sizes results in unstable estimates limiting the ability to monitor trends in demographic subpopulations.

**Discussion** The current US chlamydia surveillance system does not provide valid and timely data to estimate disease burden and monitor trends in chlamydial infection. The use of multiple data sources is not sufficient to offset inherent biases in each surveillance method. Consequently, new approaches to monitoring chlamydia morbidity are needed. Sentinel surveillance may provide higher quality data and a more comprehensive understanding of chlamydia trends.

## P51 PATIENT-REPORTED EFFECTS OF VAGINAL LACTOSE AS A PREBIOTIC FOR BACTERIAL VAGINOSIS

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**Background** Bacterial vaginosis (BV) is a common, frequently recurrent condition typically treated with oral metronidazole. Using lactose as a vaginal prebiotic to support Lactobacilli growth and lactic acid production is a new approach to treating and preventing overgrowth of vaginal pathogens. A vaginal tablet containing lactose 1.2 mg (LadyBalance ApS, Denmark) has been available in Denmark since 2004. For the treatment of BV, it is administered once daily for 1-week; it can subsequently be used on alternate days to prevent recurrence and to maintain the vaginal environment.

**Aims** To evaluate the perceived effect of a lactose vaginal tablet (LVT) on vaginal health.

**Methods** Women who had used the LVT between 2005 and 2009 were invited to complete a web-based questionnaire.

**Results** In the 728 responders who had used the LVT, the most commonly reported reasons for use were vaginal discharge with/without malodour (73%/18%), vaginal itching or irritation (37%), and vaginal dryness (16%). 90% of women with self-reported vaginal discharge with offensive odour reported improvement within 1 week. Improvement of symptoms within 1 week was also reported by 81% of women with vaginal discharge without odour, 83% with vaginal itching and irritation, and 76% with vaginal dryness. These effects were generally maintained in women who continued to use the product over longer periods (up to 1 year). Reported side effects were minor and included clear or powdery discharge.

**Discussion** An LVT offers the potential of a natural treatment for BV, vaginal itching, irritation and dryness and for protection against recurrent BV or vaginal candidiasis. Its lack of serious side effects and drug interactions could make it an attractive alternative to standard therapies. The clinical effectiveness and tolerability of the LVT require further investigation.

**Conclusions** The LVT was perceived as highly effective in treating a range of vaginal symptoms.

## P52 NEW TREATMENT GUIDELINE OF *NEISSERIA GONORRHOEAE* AND TEST OF CURE: HOW FEASIBLE IS IT?

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**Background** Treatment failure with oral cephalosporins in gonorrhoea caused by multidrug resistance has been reported. The national guidelines were updated in 2011 due to reduced sensitivity to antimicrobials. Test of cure (TOC) is recommended in all cases. However data regarding timing of TOC is limited.

**Aims** To assess (1) the feasibility of implementing new treatment regimen and (2) the optimal time to perform TOC.

**Method** Retrospective case note review of patients diagnosed with gonorrhoea in a GUM clinic between 1 June 2011 and 30 November 2011 was carried out. Data including demographics, HIV status, sites of infection, treatment and TOC were analysed.

**Results** 271 (242M, 29F) patients were included. 202 were men who have sex with men (MSM) of which 24% were HIV positive. In MSM group, 87 were urine TMA positive (95% had cultures performed), 115 positive pharyngeal TMA (97% with cultures done), 115 positive rectal TMA (96% had cultures done). 39 heterosexual males had positive urine TMA (94% with cultures done). 18 (62%) females had positive cervical TMA, all with culture performed. 12 (41%) pharyngeal, 5 (17%) vulvo-vaginal and 3 (10%) rectal were TMA positive; 58%, 60%, and 33% of these had cultures performed respectively. First-line treatment was given in 96% of cases. Second line treatments were given mostly due to penicillin allergy. TOC was attended by 55% of patients. 67% of TOC were done within 20 days of treatment. Three of these were positive, 2 within 20 days and one at 57 days post treatment which was a re-infection.

**Conclusions** New treatment of gonorrhoea is generally accepted by patients. 4% received alternative treatments, which were valid and documented. The majority of patients (74%) had culture performed prior to treatment. TOC uptake was low (55%). However the majority were performed within 20 days of treatment. Follow-up strategies must remain a priority to increase rates of TOC. Further studies are required to determine optimum time for TOC.

## P53 PCR SCREENING TESTS FOR *CHLAMYDIA TRACHOMATIS* OR *NEISSERIA GONORRHOEAE* DO NOT REQUIRE A SECOND TEST TO CONFIRM: AN AUDIT OF PATIENTS ISSUED WITH EQUIVOCAL RESULTS

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**Background** UK testing algorithms for chlamydia or gonorrhoea should have a positive predicative value (PPV) >90%. Repeat of testing of screen positive samples might be required to achieve this. Patients issued with unconfirmed positive (equivocal) results are recalled to clinic to submit another sample.

**Objectives** To assess the clinical utility of supplementary PCRs following a positive PCR screening test result.

**Methods** Laboratory reports for *Chlamydia trachomatis* or *Neisseria gonorrhoeae* issued to GUM patients between April 2010 and April 2011 were reviewed retrospectively. Positive reports were routinely confirmed by supplementary PCRs and *N gonorrhoeae* culture. Clinical records of patients with equivocal reports were retrieved to determine if infection was confirmed by a second sample on patient recall and the impact of this process on antibiotic management.

**Results** Over 15 000 patients were tested during the study period. The prevalence of chlamydia and gonorrhoea was 972 (5.75%) and 76 (0.50%), respectively. A further 78 chlamydia and 2 gonorrhoea equivocal reports were issued. Only 56 (72%) patients with an equivocal chlamydia report returned to clinic, and of these, only 41 (73%) gave a second sample to retest. PPV of the PCR screening test was calculated at 98.0% and 97.5% for detection of chlamydia infection from urine and rectal swabs, respectively. Most patients accepted antibiotic treatment before infection status had been confirmed. Prevalence of gonorrhoea infection was low but PPV of the screening PCR remained high (98.75%).